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Gly

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Gly Ala Thr Leu Lys Gly Met Ala Ala Gly Ser Ser Ser Ser Val Lys
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Trp Thr Glu

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 Glu Lys Arg Pro Phe Met Cys Ala Tyr
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<210> 68
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 Glu Pro His Glu Glu Gln Cys Leu Ser
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<210> 69
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1 5

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Phe Ala Pro Pro Gly Ala Ser Ala Tyr
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<400> 77

Phe Lys Asp Cys Glu Arg Arg Phe Ser

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Phe Lys Leu Ser His Leu Gln Met His

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<210> 79

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<400> 79

Phe Pro Asn Ala Pro Tyr Leu Pro Ser

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Phe Gln Cys Lys Thr Cys Gln Arg Lys

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Phe Arg Gly Ile Gln Asp Val Arg Arg

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<400> 85
Phe Thr Val His Phe Ser Gly Gln Phe
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<400> 87
Gly Ala Glu Pro His Glu Glu Gln Cys
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Gly Ala Glu Pro His Glu Glu Gln Cys
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Pro His Glu Glu Gln Cys Leu Ser Ala
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<400> 156
Pro Pro Pro Pro His Ser Phe Ile Lys
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<400> 157
Pro Pro Pro Pro Pro His Ser Phe Ile
1 5

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<400> 158
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 1 5

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<400> 159
 Pro Ser Cys Gln Lys Lys Phe Ala Arg
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[illegible]

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<400> 161
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Gln Cys Lys Thr Cys Gln Arg Lys Phe
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Gln Asp Val Arg Arg Val Pro Gly Val
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Gln Phe Thr Gly Thr Ala Gly Ala Cys
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<400> 209
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<400> 210
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<213> Homo sapien
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<400> 211
 Ser Gly Ala Ala Gln Trp Ala Pro Val
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<400> 212
 Ser Gly Gln Ala Arg Met Phe Pro Asn
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<210> 213
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<213> Homo sapien
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      <400> 213
Ser His His Ala Ala Gln Phe Pro Asn
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<210> 214
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<212> PRT
<213> Homo sapien
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Variable	Mean	SD	Min	Max
Age	38.5	10.2	25	55
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	1.5	10	15
Income	1500	500	1000	2500
Health status	0.8	0.2	0	1
Stress level	3.5	1.0	2	5
Life satisfaction	4.2	0.8	3	5
Work-life balance	3.8	0.9	2	5
Family support	4.5	0.7	3	5
Community involvement	3.2	0.6	2	4
Volunteer hours	1.5	0.5	0	3
Charitable donations	0.5	0.2	0	1
Political participation	0.3	0.5	0	1
Civic engagement	0.4	0.5	0	1
Environmental awareness	0.6	0.5	0	1
Social responsibility	0.7	0.4	0	1
Ethical behavior	0.8	0.3	0	1
Leadership skills	0.5	0.5	0	1
Teamwork	0.6	0.4	0	1
Communication	0.7	0.3	0	1
Problem-solving	0.8	0.2	0	1
Decision-making	0.9	0.1	0	1
Time management	0.7	0.3	0	1
Organization	0.8	0.2	0	1
Planning	0.9	0.1	0	1
Initiative	0.6	0.4	0	1
Resilience	0.7	0.3	0	1
Adaptability	0.8	0.2	0	1
Flexibility	0.9	0.1	0	1
Openness	0.7	0.3	0	1
Conscientiousness	0.8	0.2	0	1
Emotional stability	0.9	0.1	0	1
Empathy	0.6	0.4	0	1
Compassion	0.7	0.3	0	1
Kindness	0.8	0.2	0	1
Generosity	0.9	0.1	0	1
Patience	0.7	0.3	0	1
Self-control	0.8	0.2	0	1
Perseverance	0.9	0.1	0	1
Optimism	0.6	0.4	0	1
Positivity	0.7	0.3	0	1
Enthusiasm	0.8	0.2	0	1
Energy	0.9	0.1	0	1
Productivity	0.7	0.3	0	1
Efficiency	0.8	0.2	0	1
Effectiveness	0.9	0.1	0	1
Reliability	0.6	0.4	0	1
Trustworthiness	0.7	0.3	0	1
Integrity	0.8	0.2	0	1
Honesty	0.9	0.1	0	1
Transparency	0.7	0.3	0	1
Accountability	0.8	0.2	0	1
Responsibility	0.9	0.1	0	1
Commitment	0.6	0.4	0	1
Dedication	0.7	0.3	0	1
Passion	0.8	0.2	0	1
Enthusiasm	0.9	0.1	0	1
Engagement	0.7	0.3	0	1
Participation	0.8	0.2	0	1
Involvement	0.9	0.1	0	1
Contribution	0.6	0.4	0	1
Impact	0.7	0.3	0	1
Legacy	0.8	0.2	0	1
Influence	0.9	0.1	0	1
Reputation	0.7	0.3	0	1
Image	0.8	0.2	0	1
Brand	0.9	0.1	0	1
Value	0.6	0.4	0	1
Meaning	0.7	0.3	0	1
Purpose	0.8	0.2	0	1
Direction	0.9	0.1	0	1
Focus	0.7	0.3	0	1
Clarity	0.8	0.2	0	1
Understanding	0.9	0.1	0	1
Insight	0.6	0.4	0	1
Knowledge	0.7	0.3	0	1
Wisdom	0.8	0.2	0	1
Experience	0.9	0.1	0	1
Learning	0.7	0.3	0	1
Growth	0.8	0.2	0	1
Development	0.9	0.1	0	1
Progress	0.6	0.4	0	1
Success	0.7	0.3	0	1
Achievement	0.8	0.2	0	1
Realization	0.9	0.1	0	

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<210> 239

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<400> 241

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<400> 242

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<210> 244

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<211> 9
<212> PRT
<213> Mus musculus
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<400> 275
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<211> 9
<212> PRT
<213> Mus musculus
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<400> 276
Lys Arg Tyr Phe Lys Leu Ser His Leu
1 5

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<211> 9
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<213> Mus musculus
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<400> 277
Lys Thr Ser Glu Lys Pro Phe Ser Cys
1 5

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<210> 278
<211> 9
<212> PRT
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Leu Glu Cys Met Thr Trp Asn Gln Met
1 5

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<210> 287

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<400> 287

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<400> 288

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<212> PRT

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<210> 290

<212> PRT

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<212> PRT

<213> Mus

<400> 291

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<212> PRT

<213> Mus

<400> 292
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 1 5

<210> 293
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<400> 293
 Arg Met Phe Pro Asn Ala Pro Tyr Leu
 1 5

<210> 294
 <211> 9
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<400> 294
 Arg Thr Pro Tyr Ser Ser Asp Asn Leu
 1 5

<210> 295
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<400> 295
 Arg Val Ser Gly Val Ala Pro Thr Leu
 1 5

<210> 296
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 Ser Cys Leu Glu Ser Gln Pro Thr Ile
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<210> 297
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 Ser Cys Gln Lys Lys Phe Ala Arg Ser
 1 5

<210> 298
 <211> 9
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Arg Tyr Phe Lys
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 <213> Homo sapien

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 1 5 10

<210> 317
 <211> 22
 <212> PRT
 <213> Homo sapien

<400> 317
 Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr
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 His Thr Gly Lys Thr Ser
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<210> 318
 <211> 21
 <212> PRT
 <213> Homo sapien

<400> 318
 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn
 1 5 10 15
 Met His Gln Arg Asn
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<210> 319
 <211> 449
 <212> PRT
 <213> Homo sapien

<400> 319
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 Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr
 35 40 45
 Gly Ser Leu Gly Gly Pro Ala Pro Pro Ala Pro Pro Pro Pro Pro
 50 55 60
 Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly
 65 70 75 80
 Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe
 85 90 95
 Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe
 100 105 110
 Gly Pro Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe
 115 120 125
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile

130 135 140
 Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr
 145 150 155 160
 Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe
 165 170 175
 Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln
 180 185 190
 Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser
 195 200 205
 Cys Thr Gly Ser Gln Ala Leu Leu Arg Thr Pro Tyr Ser Ser Asp
 210 215 220
 Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln
 225 230 235 240
 Met Asn Leu Gly Ala Thr Leu Lys Gly Val Ala Ala Gly Ser Ser Ser
 245 250 255
 Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Ser Thr Gly Tyr Glu
 260 265 270
 Ser Asp Asn His Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile
 275 280 285
 His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Pro
 290 295 300
 Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys
 305 310 315 320
 Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys
 325 330 335
 Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro
 340 345 350
 Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp
 355 360 365
 Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln
 370 375 380
 Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr
 385 390 395 400
 His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys
 405 410 415
 Arg Trp Pro Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val
 420 425 430
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 435 440 445
 Leu

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<211> 449

<212> PRT

<213> Mus musculus

<400> 320

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 Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr
 35 40 45

Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro Pro
 50 55 60
 Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly
 65 70 75 80
 Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Leu His Phe
 85 90 95
 Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe
 100 105 110
 Gly Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe
 115 120 125
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Thr Ile
 130 135 140
 Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Ala Pro Ser Tyr
 145 150 155 160
 Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe
 165 170 175
 Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln
 180 185 190
 Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser
 195 200 205
 Cys Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp
 210 215 220
 Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln
 225 230 235 240
 Met Asn Leu Gly Ala Thr Leu Lys Gly Met Ala Ala Gly Ser Ser Ser
 245 250 255
 Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Gly Ile Gly Tyr Glu
 260 265 270
 Ser Asp Asn His Thr Ala Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile
 275 280 285
 His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Ser
 290 295 300
 Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys
 305 310 315 320
 Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys
 325 330 335
 Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro
 340 345 350
 Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp
 355 360 365
 Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln
 370 375 380
 Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr
 385 390 395 400
 His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys
 405 410 415
 Arg Trp His Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val
 420 425 430
 Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu His Val Ala
 435 440 445
 Leu

<210> 321

<211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 321
 Pro Ser Gln Ala Ser Ser Gly Gln Ala
 1 5

<210> 322
 <211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 322
 Ser Ser Gly Gln Ala Arg Met Phe Pro
 1 5

<210> 323
 <211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 323
 Gln Ala Arg Met Phe Pro Asn Ala Pro
 1 5

<210> 324
 <211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 324
 Met Phe Pro Asn Ala Pro Tyr Leu Pro
 1 5

<210> 325
 <211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 325
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys
 1 5

<210> 326
 <211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 326
 Ala Pro Tyr Leu Pro Ser Cys Leu Glu
 1 5

<210> 327
 <211> 1029
 <212> DNA
 <213> Homo sapiens

<400> 327
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 tttgacacgg atgtactcaa agcggacggg gcgatcctcg tcgatttctg ggcagagtgg 120
 tgcggtccgt gcaaaatgat cgccccgatt ctggatgaaa tcgctgacga atatcagggc 180
 aaactgaccg ttgcaaaact gaacatcgat caaaaccctg gcactgcgcc gaaatatggc 240
 atccgtggta tcccgactct gctgctgttc aaaaacgggtg aagtggcggc aaccaaagtg 300
 ggtgcaactgt ctaaagggtca gttgaaagag ttccctcgacg ctaacctggc cggttctggt 360
 tctggccata tgcagcatca ccaccatcac cacgtgtcta tcgaaggtcg tgctagctct 420
 ggtggcagcg gtctgggttcc gcggtggtagc tctgggttcgg gggacgacga cgacaaatct 480
 agtaggcaca gcacagggtg cgagagcgat aaccacacaa cgcccatcct ctgcggagcc 540
 caatacagaa tacacacgca cgggtgtcttc agaggcattc aggatgtgcg acgtgtgcct 600
 ggagtagccc cgactcttgt acggctcgga tctgagacca gtgagaaacg ccccttcatg 660
 tgtgcttacc caggctgcaa taagagatat tttaagctgt cccacttaca gatgcacagc 720
 aggaagcaca ctggtgagaa accataccag tgtgacttca aggactgtga acgaaggttt 780
 tttcgttcag accagctcaa aagacaccaa aggagacata cagggtgtgaa accattccag 840
 tgtaaaactt gtcagcgaaa gttctcccg tccgaccacc tgaagacca caccaggact 900
 catacaggtg aaaagccctt cagctgtcgg tggccaagtt gtcagaaaaa gtttgcccgg 960
 tcagatgaat tagtccgcca tcacaacatg catcagagaa acatgaccaa actccagctg 1020
 gcgctttga 1029

<210> 328
 <211> 1233
 <212> DNA
 <213> Homo sapiens

<400> 328
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 tttgacacgg atgtactcaa agcggacggg gcgatcctcg tcgatttctg ggcagagtgg 120
 tgcggtccgt gcaaaatgat cgccccgatt ctggatgaaa tcgctgacga atatcagggc 180
 aaactgaccg ttgcaaaact gaacatcgat caaaaccctg gcactgcgcc gaaatatggc 240
 atccgtggta tcccgactct gctgctgttc aaaaacgggtg aagtggcggc aaccaaagtg 300
 ggtgcaactgt ctaaagggtca gttgaaagag ttccctcgacg ctaacctggc cggttctggt 360
 tctggccata tgcagcatca ccaccatcac cacgtgtcta tcgaaggtcg tgctagctct 420
 ggtggcagcg gtctgggttcc gcggtggtagc tctgggttcgg gggacgacga cgacaaatct 480
 agtaggggct ccgacgttcg tgacctgaac gcaactgtgc cggcagttcc gtccctgggt 540
 ggtggtggtg gttgcgcaact gccggttagc ggtgcagcac agtgggctcc gggttctggac 600
 ttcgcaccgc cgggtgcac cgcatacggg tccctgggtg gtccggcacc gccgcggca 660
 ccgcgccgc cgcgcgccgc gccgcgcgc tccctcatca aacaggaacc gagctgggtg 720
 ggtgcagaac cgcaogaaga acagtgcctg agcgattca ccgttcaact ctccggccag 780
 ttcaactggca cagccggagc ctgtcgttac gggcccttcg gtcctcctcc gccagccag 840
 gcgtcatccg gccaggccag gatgtttcct aacgcgccct acctgccag ctgcctcgag 900
 agccagcccc ctattcgcaa tcagggttac agcacggtca ccttcgacgg gacgcccgag 960
 tacggtcaca cgccctcgca ccatgcggcg cagttcccca accactcatt caagcatgag 1020
 gatcccatgg gccagcaggg ctgctgggt gagcagcagt actcgggtgc gcccccggtc 1080
 tatggctgcc acacccccac cgacagctgc accggcagcc aggcctttgct gctgaggacg 1140
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 cagatgaact taggagccac cttaaagggc tga 1233

<210> 329

<211> 1776
 <212> DNA
 <213> Homo sapiens

<400> 329

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tgcggtccgt gcaaaatgat cgccccgatt ctggatgaaa tcgctgacga atatcagggc 180
aaactgaccg ttgcaaaact gaacatcgat caaaaccctg gcactgcgcc gaaatatggc 240
atccgtggta tcccgactct gctgctgttc aaaaacgggtg aagtggcggc aaccaaagtg 300
ggtgcaactgt ctaaagggtca gttgaaagag ttctctgacg ctaacctggc cggttctggt 360
tctggccata tgacgacatca ccaccatcac cactgtgtcta tcgaaggtcg tgctagctct 420
ggtggcagcg gtctgggttcc gcgtggtagc tctggttcgg gggacgacga cgacaaatct 480
agtggatggg gctccgacgt tcgtgacctg aacgcactgc tgccggcagt tccgtccctg 540
ggtggtggtg gtggttgccg actgcgggtt agcggtgacg cacagtgggc tccggttctg 600
gacttcgcac cgccgggtgc atccgcatac ggttccctgg gtggtccggc accgccggcg 660
gcaccgccgc cgccgccgcc gccgcgccgc cactccttca tcaaacagga accgagctgg 720
ggtggtgcag aaccgcacga agaacagtgc ctgagcgcac tcaccgttca cttctccggc 780
cagttcactg gcacagccgg agcctgtcgc tacgggccct tcggtcctcc tccgcccgag 840
caggcgtcat ccggccaggc caggatgttt cctaaccgcg cctacctgcc cagctgcctc 900
gagagccagc ccgctattcg caatcagggt tacagcacgg tcaccttcca cgggacgccc 960
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gaggatccca tggggccagca gggctcgctg ggtgagcagc agtactcggg gccgcccccg 1080
gtctatggct gccacacccc caccgacagc tgcaccggca gccaggcttt gctgctgagg 1140
acgccctaca gcagtgacaa ttataccaa atgacatccc agcttgaatg catgacctgg 1200
aatcagatga acttaggagc caccttaaag ggccacagca cagggtacga gagcgataac 1260
cacacaacgc ccatcctctg cggagcccaa tacagaatac acacgcacgg tgtcttcaga 1320
ggcattcagg atgtgogacg tgtgcctgga gtagcccccga ctcttgtagc gtcggcatct 1380
gagaccagtg agaaacgccc ctctcatgtgt gcttaccag gctgcaataa gagatatttt 1440
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gacttcaagg actgtgaacg aagggttttt cgttcagacc agctcaaaaag acaccaaagg 1560
agacatacag gtgtgaaacc attccagtgt aaaacttgtc agcgaaagtt ctcccggtcc 1620
gaccacctga agaccacac caggactcat acagggtgaaa agcccttcag ctgtcggtgg 1680
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cagagaaaca tgaccaaact ccagctggcg ctttga 1776

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<210> 330
 <211> 771
 <212> DNA
 <213> Homo sapiens

<400> 330

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atgcagcatc accaccatca ccacggctcc gacgttcgtg acctgaacgc actgctgccg 60
gcagttccgt cctgggtggg tgggtgggtg tgccgactgc cggtttagcg tgcagcacag 120
tggtctccgg ttctggactt cgcacgcgcg ggtgcatccg catacgggtc cctgggtggt 180
ccggcaccgc cgccggcacc gccgcgcgcg ccgcgcgcgc cgccgcactc cttcatcaa 240
caggaaaccga gctgggggtg tgcaaaaccg cacgaagaac agtgccctgag cgcattcacc 300
gttcaacttct ccggccagtt cactggcaca gccggagcct gtcgctacgg gcccttcggt 360
cctcctccgc ccagccaggc gtcateccgc caggccagga tgtttctctaa cgcgccctac 420
ctgccagct gcctcgagag ccagcccgtt attcgcaatc agggttacag cacggtcacc 480
ttcgacggga cgcccagcta cggtcacacg cctcgcacc atgcggcgca gttccccaac 540
cactcattca agcatgagga tcccatgggc cagcagggtc cgctgggtga gcagcagtac 600
tcggtgccgc ccccggtcta tgggtgccac acccccaccg acagctgcac cggcagccag 660
gctttgctgc tgaggacgcc ctacagcagt gacaatttat accaaatgac atcccagctt 720

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				165					170					175			
Val	Pro	Ser	Leu	Gly	Gly	Gly	Gly	Gly	Cys	Ala	Leu	Pro	Val	Ser	Gly		
			180					185					190				
Ala	Ala	Gln	Trp	Ala	Pro	Val	Leu	Asp	Phe	Ala	Pro	Pro	Gly	Ala	Ser		
		195					200					205					
Ala	Tyr	Gly	Ser	Leu	Gly	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Pro	Pro	Pro		
	210					215					220						
Pro	Pro	Pro	Pro	Pro	Pro	His	Ser	Phe	Ile	Lys	Gln	Glu	Pro	Ser	Trp		
225					230					235					240		
Gly	Gly	Ala	Glu	Pro	His	Glu	Glu	Gln	Cys	Leu	Ser	Ala	Phe	Thr	Val		
			245						250						255		
His	Phe	Ser	Gly	Gln	Phe	Thr	Gly	Thr	Ala	Gly	Ala	Cys	Arg	Tyr	Gly		
			260					265					270				
Pro	Phe	Gly	Pro	Pro	Pro	Pro	Ser	Gln	Ala	Ser	Ser	Gly	Gln	Ala	Arg		
		275					280					285					
Met	Phe	Pro	Asn	Ala	Pro	Tyr	Leu	Pro	Ser	Cys	Leu	Glu	Ser	Gln	Pro		
	290					295					300						
Ala	Ile	Arg	Asn	Gln	Gly	Tyr	Ser	Thr	Val	Thr	Phe	Asp	Gly	Thr	Pro		
305					310					315					320		
Ser	Tyr	Gly	His	Thr	Pro	Ser	His	His	Ala	Ala	Gln	Phe	Pro	Asn	His		
			325						330					335			
Ser	Phe	Lys	His	Glu	Asp	Pro	Met	Gly	Gln	Gln	Gly	Ser	Leu	Gly	Glu		
			340					345					350				
Gln	Gln	Tyr	Ser	Val	Pro	Pro	Pro	Val	Tyr	Gly	Cys	His	Thr	Pro	Thr		
		355					360					365					
Asp	Ser	Cys	Thr	Gly	Ser	Gln	Ala	Leu	Leu	Leu	Arg	Thr	Pro	Tyr	Ser		
	370					375					380						
Ser	Asp	Asn	Leu	Tyr	Gln	Met	Thr	Ser	Gln	Leu	Glu	Cys	Met	Thr	Trp		
385					390					395					400		
Asn	Gln	Met	Asn	Leu	Gly	Ala	Thr	Leu	Lys	Gly	His	Ser	Thr	Gly	Tyr		
			405						410					415			
Glu	Ser	Asp	Asn	His	Thr	Thr	Pro	Ile	Leu	Cys	Gly	Ala	Gln	Tyr	Arg		
			420					425					430				
Ile	His	Thr	His	Gly	Val	Phe	Arg	Gly	Ile	Gln	Asp	Val	Arg	Arg	Val		
		435					440					445					
Pro	Gly	Val	Ala	Pro	Thr	Leu	Val	Arg	Ser	Ala	Ser	Glu	Thr	Ser	Glu		
	450					455					460						
Lys	Arg	Pro	Phe	Met	Cys	Ala	Tyr	Pro	Gly	Cys	Asn	Lys	Arg	Tyr	Phe		
465					470					475					480		
Lys	Leu	Ser	His	Leu	Gln	Met	His	Ser	Arg	Lys	His	Thr	Gly	Glu	Lys		
			485						490					495			
Pro	Tyr	Gln	Cys	Asp	Phe	Lys	Asp	Cys	Glu	Arg	Arg	Phe	Phe	Arg	Ser		
			500					505					510				
Asp	Gln	Leu	Lys	Arg	His	Gln	Arg	His	Thr	Gly	Val	Lys	Pro	Phe			
	515						520					525					
Gln	Cys	Lys	Thr	Cys	Gln	Arg	Lys	Phe	Ser	Arg	Ser	Asp	His	Leu	Lys		
	530					535					540						
Thr	His	Thr	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Phe	Ser	Cys	Arg	Trp		
545					550					555					560		
Pro	Ser	Cys	Gln	Lys	Lys	Phe	Ala	Arg	Ser	Asp	Glu	Leu	Val	Arg	His		
			565					570						575			
His	Asn	Met	His	Gln	Arg	Asn	Met	Thr	Lys	Leu	Gln	Leu	Ala	Leu			
			580					585						590			

Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys Arg Pro
 50 55 60
 Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys Leu Ser
 65 70 75 80
 His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro Tyr Gln
 85 90 95
 Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Phe Arg Ser Asp Gln Leu
 100 105 110
 Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln Cys Lys
 115 120 125
 Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr
 130 135 140
 Arg Thr His Thr Gly Glu Lys Pro Phe Ser Cys Arg Trp Pro Ser Cys
 145 150 155 160
 Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn Met
 165 170 175
 His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala Leu
 180 185

<210> 337
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 337
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 tgggctccag ttctggactt cgcaccgcct ggtgcacccg catacgggtc cctgggtggt 180
 ccagcacctc cgcccgaac gccccaccg cctccaccgc ccccgcactc cttcatcaaa 240
 caggaacctg gctgggggtg tgcagaaccg cacgaagaac agtgccctgag cgcattctga 300
 gaattctgca gatattcatc acac 324

<210> 338
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 338
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 ttctccggcc agttcactgg cacagccgga gcctgtgcgt acggggccctt cggtcctcct 120
 ccgcccagcc aggcgatcgc cggccaggcc aggatgtttc ctaacgcgcc ctacctgcc 180
 agctgcctcg agagccagcc cgctattcgc aatcagggtt acagcacggt caccttcgac 240
 gggacgccc gctacgggtc cacgccctcg caccatgcgg cgcagttccc caaccactca 300
 ttcaagcatg aggatcccat gggccagcag ggctcgctgg gtgagcagca gtactcgggtg 360
 ccgcccccg tctatggctg ccacaccccc accgacagct gcaccggcag ccaggctttg 420
 ctgctgagga cgcctacag cagtgcacat ttatactgat ga 462

<210> 339
 <211> 405
 <212> DNA
 <213> Homo sapiens

<400> 339
 atgcagcatc accaccatca ccaccaggct ttgctgctga ggacgcccta cagcagtgac 60

aatttatacc	aaatgacatc	ccagcttgaa	tgcattgacct	ggaatcagat	gaacttagga	120
gccaccttaa	agggccacag	cacagggtac	gagagcgata	accacacaac	gccatcctc	180
tgcggagccc	aatacagaat	acacacgcac	ggtgtcttca	gaggcattca	ggatgtgcga	240
cgtgtgcctg	gagtagcccc	gactcttgta	cggtcggcat	ctgagaccag	tgagaaacgc	300
cccttcattg	gtgcttacct	aggctgcaat	aagagatatt	ttaagctgtc	ccacttacag	360
atgcacagca	ggaagcacac	tggtgagaaa	ccataccagt	gatga		405

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<210> 340
<211> 339
<212> DNA
<213> Homo sapiens
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<400> 340
atgcagcattc accaccatca ccaccacagc aggaagcaca ctgggtgagaa accataccag 60
tgtgacttca aggactgtga acgaaggttt tttcgttcag accagctcaa aagacaccaa 120
aggagacata caggtgtgaa accattccag tgtaaaactt gtcagcgaaa gttctcccg 180
tccgaccacc tgaagaccca caccaggact catacagggtg aaaagccott cagctgtcgg 240
tggccaagtt gtcagaaaaa gtttgcccgg tcagatgaat tagtccgcca tcacaacatg 300
catcagagaa acatgaccaa actccagctg gcgctttga 339
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<210> 341
<211> 1110
<212> DNA
<213> Homo sapiens
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<400>	341					
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actggcacag	ccggagcctg	tcgtacacgg	cccttcgggc	ctcctccgcc	cagccaggcg	180
tcatccggcc	aggccaggat	gtttccctaac	gcgccttacc	tgcccagctg	cctcgagagc	240
cagcccgtca	ttcgcaatca	gggttacagc	acgggtcacct	tcgacgggac	gccagctac	300
ggtcacacgc	cctcgcacca	tgccggcgcag	ttccccaacc	actcattcaa	gcattgaggt	360
cccatggggc	agcagggtcc	gctgggtgag	cagcagtaact	cgggtgcgcgc	ccgggtctat	420
ggctgccaca	ccccaccga	cagctgcacc	ggcagccagg	ctttgtgtgc	caggacgccc	480
tacagcagtg	acaatttata	ccaaatgaca	tcccagcttg	aatgcattgac	ctggaatcag	540
atgaacttag	gagccacctt	aaagggccac	agcacagggt	acgagagcga	taaccacaca	600
acgcccattc	tctgcggagc	ccaatacaga	atacacacgc	acggtgtctt	cagaggcatt	660
caggatgtgc	gacgtgtgcc	tggagtagcc	ccgactcttg	tacggctggc	atctgagacc	720
agtgagaaac	gccccttcat	gtgtgcttac	ccaggctgca	ataagagata	ttttaagctg	780
tcccacttac	agatgcacag	caggaagcac	actggtgaga	aaccatacca	gtgtgacttc	840
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acagggtgtga	aaccattcca	gtgtaaaaact	tgtcagcgaa	agttctcccg	gtccgaccac	960
ctgaagaccc	acaccaggac	tcatacaggt	gaaaagccct	tcagctgtcg	gtggccaagt	1020
gtgcagaaaa	agtttgcgcg	gtcagatgaa	ttagtccgcc	atcacaacat	gcattcagaga	1080
aacatgacca	aactccagct	ggcgctttga				1110

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<210> 342
<211> 99
<212> PRT
<213> Homo sapiens
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[illegible]

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<210> 345
<211> 112
<212> PRT
<213> Homo sapiens
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<400> 345															
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				5					10					15	
Lys	Pro	Tyr	Gln	Cys	Asp	Phe	Lys	Asp	Cys	Glu	Arg	Arg	Phe	Phe	Arg
			20					25					30		
Ser	Asp	Gln	Leu	Lys	Arg	His	Gln	Arg	Arg	His	Thr	Gly	Val	Lys	Pro
			35				40					45			
Phe	Gln	Cys	Lys	Thr	Cys	Gln	Arg	Lys	Phe	Ser	Arg	Ser	Asp	His	Leu
	50					55					60				
Lys	Thr	His	Thr	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Phe	Ser	Cys	Arg
	65				70					75					80
Trp	Pro	Ser	Cys	Gln	Lys	Lys	Phe	Ala	Arg	Ser	Asp	Glu	Leu	Val	Arg
				85					90					95	
His	His	Asn	Met	His	Gln	Arg	Asn	Met	Thr	Lys	Leu	Gln	Leu	Ala	Leu
			100					105					110		

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<210> 346
<211> 369
<212> PRT
<213> Homo sapiens
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<400> 346															
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				5					10					15	
Ser	Trp	Gly	Gly	Ala	Glu	Pro	His	Glu	Glu	Gln	Cys	Leu	Ser	Ala	Phe
			20					25					30		
Thr	Val	His	Phe	Ser	Gly	Gln	Phe	Thr	Gly	Thr	Ala	Gly	Ala	Cys	Arg
		35				40						45			
Tyr	Gly	Pro	Phe	Gly	Pro	Pro	Pro	Pro	Ser	Gln	Ala	Ser	Ser	Gly	Gln
	50					55					60				
Ala	Arg	Met	Phe	Pro	Asn	Ala	Pro	Tyr	Leu	Pro	Ser	Cys	Leu	Glu	Ser
65					70					75					80

[illegible]

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<210> 347
<211> 21
<212> DNA
<213> Artificial Sequence
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<220>
<223> Primer

<400> 347
ggctccgacg tgcgggacct g

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<210> 348
<211> 30
<212> DNA
<213> Artificial Sequence
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<223> Primer

30

<213> Artificial Sequence

<223> Primer

21

<213> Artificial Sequence

<223> Primer

30

<213> Artificial Sequence

<223> Primer

21

<213> Artificial Sequence

<223> Primer

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<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 353

cacgaagaac agtgcctgag cgcattcac

29

<210> 354

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 354

ccggcgaatt catcagtata aattgtcact gc

32

<210> 355

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 355

caggctttgc tgctgaggac gccc

24

<210> 356

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 356

cacggagaat tcatcactgg tatggtttct cacc

34

<210> 357

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 357

cacagcagga agcacactgg tgagaaac

28

<210> 358

<211> 30

<210> 363

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<211> 35
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<213> Artificial Sequence
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<220>
<223> Primer

<400> 363
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<211> 38
<212> DNA
<213> Artificial Sequence
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<220>
<223> Primer

<400> 364
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<211> 35
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<213> Artificial Sequence
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<220>
<223> Primer

<400> 365
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<213> Artificial Sequence
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<220>
<223> Primer

<400> 366
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<220>
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<400> 367
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<220>
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<220>
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<400> 372
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<220>
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<400> 373
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<220>
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<400> 374
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<220>
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<400> 375
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<210> 376
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<220>
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<400> 376
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<210> 377
 <211> 1292
 <212> DNA
 <213> Homo sapiens

<220>
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$\langle 223 \rangle \quad n = A, T, C \text{ or } G$

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<211> 1291

<213> Homo sapiens

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1291

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 <212> DNA
 <213> Homo sapiens

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 ccatccggcc agaccaggat gttgccccag gcgccctatc tgtcgagttg cctcaggagc 420
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<210> 380
 <211> 3020
 <212> DNA
 <213> Homo sapiens

<400> 380
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 cagcccaggc gcccgggccc cgcgctctcc tcgcgcgat cctggacttc ctcttgctgc 180
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 tgcccagctg cctcgagagc cagcccgtca ttcgcaatca gggttacagc acggtcacct 840
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tacagcagtg acaatttata ccaaattgaca tcccagcttg aatgcatgac ctggaatcag 720
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tgtcagaaaa agtttgcccg gtcagatgaa ttagtccgcc atcacaacat gcatcagaga 1260
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```

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<210> 382
<211> 1491
<212> DNA
<213> Homo sapiens

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```

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<210> 383
<211> 1251
<212> DNA
<213> Homo sapiens

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<400> 383
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<210> 384
 <211> 228
 <212> DNA
 <213> Homo sapiens

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<400> 384
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cagagggtga tctttgcggg aaaacagctg gaagatggtc gtaccctgtc tgactacaac 180
atccagaaag agtccacctt gcacctggtg ctccgtctca gaggtggg 228

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<210> 385
 <211> 1515
 <212> DNA
 <213> Homo sapiens

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<400> 385
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tgtaaaactt gtcagcgaaa gttctcccgg tccgaccacc tgaagaccca caccaggact 960
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tcagatgaat tagtccgcca tcacaacatg catcagagaa acatgaccaa actccagctg 1080
gcgctttga                                     1089

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<210> 388
<211> 1035
<212> DNA
<213> Homo sapiens

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<400> 388
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agaggcattc agtga                                     1035

```

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<210> 389
<211> 1263
<212> DNA
<213> Homo sapiens

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<400> 389
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gtcgacggcg ctccgatcaa ctcgccacc gcgatggcgg acgcgcttaa cgggcatcat 300
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ccgcgcgcgc cgccgcgcgc gcaactcctt atcaaacagg aaccgagctg ggggtggtgca 660
gaaccgcacg aagaacagtg cctgagcgca ttaccgttc acttctccgg ccagttcact 720
ggcacagccg gagcctgtcg ctacgggccc ttcggtcctc ctccgcccag ccaggcgtca 780
tccggccagg ccaggatgtt tcctaacgcg cctacactgc ccagctgcct cgagagccag 840
cccgtattc gcaatcaggg ttacagcacg gtcaccttcg acgggacgcc cagctacggt 900
cacacgcctt cgcaccatgc ggcgcagttc cccaaccact cattcaagca tgaggatccc 960
atgggcccagc agggctcgtt ggggtgagcag cagtactcgg tgccgcccc ggtctatggc 1020
tgccacaccc ccaccgacag ctgcaccggc agccaggctt tgetgctgag gacgcctac 1080

```

```

agcagtgcaca atttataacca aatgacatcc cagcttgaat gcatgacctg gaatcagatg 1140
aacttaggag ccaccttaaa gggccacagc acagggtagc agagcgataa ccacacaacg 1200
cccatcctct gcggagccca atacagaata cacacgcacg gtgtcttcag aggcattcag 1260
tga 1263

```

```

<210> 390
<211> 1707
<212> DNA
<213> Homo sapiens

```

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<400> 390
atgacggccg cgtccgataa cttccagctg tcccaggggtg ggcaggggatt cgccattccg 60
atcgggcagc cgatggcgat cgcggggccag atcaagcttc ccaccgttca tatcgggcct 120
accgccttcc tcggcttggg tgttgctgac aacaacggca acggcgacacg agtccaacgc 180
gtggctcggga gcgctccggc ggcaagtctc ggcattctca ccggcgacgt gatcaccgcg 240
gtcgacggcg ctccgatcaa ctcgggccacc gcgatggcgg acgcgcttaa cgggcatcat 300
cccggtgacg tcattctcggg gacctggcaa accaagtcgg gcggcacgcg tacagggaac 360
gtgacattgg ccgagggacc ccggggccgaa ttcccgtgg tgccgcgcgg cagcccgatg 420
ggctccgacg ttccgggacct gaacgcactg ctgcccgcag ttccgtccct ggggtgggtg 480
gggtggttgc cactgccggg tagcgggtgca gcacagtggg ctccggttct ggacttcgca 540
ccgcgcgggtg catccgcata cggttccctg ggtgggtccg caccgccgcc ggcaccgccg 600
ccgcgcgcgc ccgcgcgcgc gcaactcttc atcaaacagg aaccgagctg ggggtgggtgca 660
gaaccgcacg aagaacagtg cctgagcgca ttcaccgttc acttctccgg ccagttcact 720
ggcacagccg gagcctgtcg ctacggggcc ttccgtcttc ctccgccag ccaggcgctca 780
tccggccagg ccaggatgtt tctaacgcg ccctacctgc ccagctgcct cgagagccag 840
cccgtatttc gcaatcaggg ttacagcacg gtcaccttc acgggacgcc cagctacggg 900
cacacgccct cgcaccatgc ggcgcagttc cccaaccact cattcaagca tgaggatccc 960
atgggccagc agggctcgtg ggggtgagcag cagtactcgg tgccgcccc ggtctatggc 1020
tgccacaccc ccaccgacag ctgcaccggc agccaggctt tgctgctgag gacgccctac 1080
agcagtgcaca atttataacca aatgacatcc cagcttgaat gcatgacctg gaatcagatg 1140
aacttaggag ccaccttaaa gggccacagc acagggtagc agagcgataa ccacacaacg 1200
cccatcctct gcggagccca atacagaata cacacgcacg gtgtcttcag aggcattcag 1260
gatgtgcgac gtgtgcctgg agtagcccc actcttgtag ggtcggcatc tgagaccagt 1320
gagaaaacgcc ctttcattgt tgcttaccca ggctgcaata agagatattt taagctgtcc 1380
catttacaga tgcacagcag gaagcacact ggtgagaaac cataccagtg tgacttcaag 1440
gactgtgaac gaaggttttt tcgttcagac cagctcaaaa gacaccaaag gagacataca 1500
gggtgtgaaac cattccagtg taaaacttgt cagcgaaagt tctcccggtc cgaccacctg 1560
aagaccaca ccaggactca tacagggtgaa aagcccttca gctgtcgggt gccaaagtgt 1620
cagaaaaagt ttgcccggtc agatgaatta gtccgccatc acaacatgca tcagagaaac 1680
atgacaaaac tccagctggc gctttga 1707

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```

<210> 391
<211> 344
<212> PRT
<213> Homo sapiens

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```

<400> 391
Met Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly
      5                      10                      15

Phe Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Lys
      20                      25                      30

Leu Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly Leu Gly Val

```

35	40	45
Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val Val Gly Ser		
50	55	60
Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val Ile Thr Ala		
65	70	75 80
Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala Asp Ala Leu		
	85	90 95
Asn Gly His His Pro Gly Asp Val Ile Ser Val Thr Trp Gln Thr Lys		
	100	105 110
Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu Gly Pro Pro		
	115	120 125
Ala Glu Phe His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly Ala		
	130	135 140
Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe Ser		
	145	150 155 160
Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe Gly		
	165	170 175
Pro Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro		
	180	185 190
Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile Arg		
	195	200 205
Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr Gly		
	210	215 220
His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe Lys		
	225	230 235 240
His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln Tyr		
	245	250 255
Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser Cys		
	260	265 270
Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp Asn		
	275	280 285
Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln Met		
	290	295 300
Asn Leu Gly Ala Thr Leu Lys Gly His Ser Thr Gly Tyr Glu Ser Asp		
	305	310 315 320
Asn His Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile His Thr		

325

330

335

His Gly Val Phe Arg Gly Ile Gln
340

<210> 392

<211> 568

<212> PRT

<213> Homo sapiens

<400> 392

Met Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly
5 10 15

Phe Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Lys
20 25 30

Leu Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly Leu Gly Val
35 40 45

Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val Val Gly Ser
50 55 60

Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val Ile Thr Ala
65 70 75 80

Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala Asp Ala Leu
85 90 95

Asn Gly His His Pro Gly Asp Val Ile Ser Val Thr Trp Gln Thr Lys
100 105 110

Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu Gly Pro Pro
115 120 125

Ala Glu Phe Pro Leu Val Pro Arg Gly Ser Pro Met Gly Ser Asp Val
130 135 140

Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro Ser Leu Gly Gly Gly
145 150 155 160

Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala Gln Trp Ala Pro Val
165 170 175

Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr Gly Ser Leu Gly Gly
180 185 190

Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro Pro Pro Pro Pro His
195 200 205

Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly Ala Glu Pro His Glu
210 215 220

Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe Ser Gly Gln Phe Thr
 225 230 235 240
 Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe Gly Pro Pro Pro Pro
 245 250 255
 Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala Pro Tyr
 260 265 270
 Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile Arg Asn Gln Gly Tyr
 275 280 285
 Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr Gly His Thr Pro Ser
 290 295 300
 His His Ala Ala Gln Phe Pro Asn His Ser Phe Lys His Glu Asp Pro
 305 310 315 320
 Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln Tyr Ser Val Pro Pro
 325 330 335
 Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser Cys Thr Gly Ser Gln
 340 345 350
 Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp Asn Leu Tyr Gln Met
 355 360 365
 Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln Met Asn Leu Gly Ala
 370 375 380
 Thr Leu Lys Gly His Ser Thr Gly Tyr Glu Ser Asp Asn His Thr Thr
 385 390 395 400
 Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile His Thr His Gly Val Phe
 405 410 415
 Arg Gly Ile Gln Asp Val Arg Arg Val Pro Gly Val Ala Pro Thr Leu
 420 425 430
 Val Arg Ser Ala Ser Glu Thr Ser Glu Lys Arg Pro Phe Met Cys Ala
 435 440 445
 Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys Leu Ser His Leu Gln Met
 450 455 460
 His Ser Arg Lys His Thr Gly Glu Lys Pro Tyr Gln Cys Asp Phe Lys
 465 470 475 480
 Asp Cys Glu Arg Arg Phe Phe Arg Ser Asp Gln Leu Lys Arg His Gln
 485 490 495
 Arg Arg His Thr Gly Val Lys Pro Phe Gln Cys Lys Thr Cys Gln Arg
 500 505 510

Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr His Thr
515 520 525

Gly Glu Lys Pro Phe Ser Cys Arg Trp Pro Ser Cys Gln Lys Lys Phe
530 535 540

Ala Arg Ser Asp Glu Leu Val Arg His His Asn Met His Gln Arg Asn
545 550 555 560

Met Thr Lys Leu Gln Leu Ala Leu
565

<210> 393

<211> 420

<212> PRT

<213> Homo sapiens

<400> 393

Met Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly
5 10 15

Phe Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Lys
20 25 30

Leu Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly Leu Gly Val
35 40 45

Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val Val Gly Ser
50 55 60

Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val Ile Thr Ala
65 70 75 80

Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala Asp Ala Leu
85 90 95

Asn Gly His His Pro Gly Asp Val Ile Ser Val Thr Trp Gln Thr Lys
100 105 110

Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu Gly Pro Pro
115 120 125

Ala Glu Phe Pro Leu Val Pro Arg Gly Ser Pro Met Gly Ser Asp Val
130 135 140

Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro Ser Leu Gly Gly Gly
145 150 155 160

Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala Gln Trp Ala Pro Val
165 170 175

Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr Gly Ser Leu Gly Gly
180 185 190

	5	10	15
His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe Ser Gly Gln	20	25	30
Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe Gly Pro Pro	35	40	45
Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala	50	55	60
Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile Arg Asn Gln	65	70	75
Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr Gly His Thr	85	90	95
Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe Lys His Glu	100	105	110
Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln Tyr Ser Val	115	120	125
Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser Cys Thr Gly	130	135	140
Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp Asn Leu Tyr	145	150	155
Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln Met Asn Leu	165	170	175
Gly Ala Thr Leu Lys Gly His Ser Thr Gly Tyr Glu Ser Asp Asn His	180	185	190
Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile His Thr His Gly	195	200	205
Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Pro Gly Val Ala Pro	210	215	220
Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys Arg Pro Phe Met	225	230	235
Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys Leu Ser His Leu	245	250	255
Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro Tyr Gln Cys Asp	260	265	270
Phe Lys Asp Cys Glu Arg Arg Phe Phe Arg Ser Asp Gln Leu Lys Arg	275	280	285
His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln Cys Lys Thr Cys			

Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile His Thr His Gly
195 200 205

<210> 396

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> PCR primer

<400> 396

gacgaaagca tatgcactcc ttcatcaaac

30

<210> 397

<211> 31

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> PCR primer

<400> 397

cgcgtgaatt catcactgaa tgcctctgaa g

31

<210> 398

<211> 31

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> PCR primer

<400> 398

cqataagcat atgacggccg cgtccgataa c

31

<210> 399

<211> 31

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> PCR primer

<400> 399

cgcgtgaatt catcactgaa tgcctctgaa g

31

<210> 400
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 400
 cgataagcat atgacggccg cgtccgataa c 31

<210> 401
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 401
 gtctgcagcg gccgctcaaa gcgccagc 28

<210> 402
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 402
 gacgaaagca tatgcactcc ttcataaaac 30

<210> 403
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 403
 gtctgcagcg gccgctcaaa gcgccagc 28

<210> 404
 <211> 449
 <212> PRT
 <213> Homo sapiens

<400> 404
 Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro
 1 5 10 15

Ser	Leu	Gly	Gly	Gly	Gly	Cys	Ala	Leu	Pro	Val	Ser	Gly	Ala	Ala
			20				25					30		
Gln	Trp	Ala	Pro	Val	Leu	Asp	Phe	Ala	Pro	Pro	Gly	Ala	Ser	Tyr
		35				40					45			
Gly	Ser	Leu	Gly	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Pro	Pro	Pro	Pro
	50					55				60				
Pro	Pro	Pro	Pro	His	Ser	Phe	Ile	Lys	Gln	Glu	Pro	Ser	Trp	Gly
65					70					75				80
Ala	Glu	Pro	His	Glu	Glu	Gln	Cys	Leu	Ser	Ala	Phe	Thr	Val	His
				85				90					95	Phe
Ser	Gly	Gln	Phe	Thr	Gly	Thr	Ala	Gly	Ala	Cys	Arg	Tyr	Gly	Pro
			100					105				110		Phe
Gly	Pro	Pro	Pro	Pro	Ser	Gln	Ala	Ser	Ser	Gly	Gln	Ala	Arg	Met
		115					120					125		Phe
Pro	Asn	Ala	Pro	Tyr	Leu	Pro	Ser	Cys	Leu	Glu	Ser	Gln	Pro	Ala
	130					135					140			Ile
Arg	Asn	Gln	Gly	Tyr	Ser	Thr	Val	Thr	Phe	Asp	Gly	Thr	Pro	Ser
145					150					155				160
Gly	His	Thr	Pro	Ser	His	His	Ala	Ala	Gln	Phe	Pro	Asn	His	Ser
				165					170				175	Phe
Lys	His	Glu	Asp	Pro	Met	Gly	Gln	Gln	Gly	Ser	Leu	Gly	Glu	Gln
			180					185				190		Gln
Tyr	Ser	Val	Pro	Pro	Pro	Val	Tyr	Gly	Cys	His	Thr	Pro	Thr	Asp
		195					200					205		Ser
Cys	Thr	Gly	Ser	Gln	Ala	Leu	Leu	Leu	Arg	Thr	Pro	Tyr	Ser	Ser
	210					215					220			Asp
Asn	Leu	Tyr	Gln	Met	Thr	Ser	Gln	Leu	Glu	Cys	Met	Thr	Trp	Asn
225					230					235				240
Met	Asn	Leu	Gly	Ala	Thr	Leu	Lys	Gly	Val	Ala	Ala	Gly	Ser	Ser
				245					250				255	Ser
Ser	Val	Lys	Trp	Thr	Glu	Gly	Gln	Ser	Asn	His	Ser	Thr	Gly	Tyr
			260					265					270	Glu
Ser	Asp	Asn	His	Thr	Thr	Pro	Ile	Leu	Cys	Gly	Ala	Gln	Tyr	Arg
		275					280					285		Ile
His	Thr	His	Gly	Val	Phe	Arg	Gly	Ile	Gln	Asp	Val	Arg	Arg	Val
	290					295					300			Pro
Gly	Val	Ala	Pro	Thr	Leu	Val	Arg	Ser	Ala	Ser	Glu	Thr	Ser	Glu
305					310					315				Lys
Arg	Pro	Phe	Met	Cys	Ala	Tyr	Pro	Gly	Cys	Asn	Lys	Arg	Tyr	Phe
				325					330					335
Leu	Ser	His	Leu	Gln	Met	His	Ser	Arg	Lys	His	Thr	Gly	Glu	Lys
			340					345				350		Pro
Tyr	Gln	Cys	Asp	Phe	Lys	Asp	Cys	Glu	Arg	Arg	Phe	Ser	Arg	Ser
		355					360					365		Asp
Gln	Leu	Lys	Arg	His	Gln	Arg	Arg	His	Thr	Gly	Val	Lys	Pro	Phe
	370					375					380			Gln
Cys	Lys	Thr	Cys	Gln	Arg	Lys	Phe	Ser	Arg	Ser	Asp	His	Leu	

Leu Lys Arg His Gln Arg Gly His Thr Gly Val Lys Pro Leu Gln Cys
 355 360 365
 Glu Ala Arg Arg Arg Pro Pro Arg Pro Gly His Leu Lys Val His Thr
 370 375 380
 Arg Thr His Thr Gly Gly Glu Pro Phe Ser Cys Arg Trp Pro Ser Cys
 385 390 395 400
 Gln Glu Lys Ser Ala Arg Pro Asp Glu Ser Ala Arg Arg His Asn Met
 405 410 415
 His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala Leu
 420 425

<210> 406

<211> 414

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 85, 86, 172, 173, 242, 245, 246, 247

<223> Xaa = Any Amino Acid

<400> 406

Met Gly Ser Asp Val Arg Asp Leu Ser Ala Leu Leu Pro Ala Val Pro
 1 5 10 15
 Ser Leu Gly Asp Gly Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala
 20 25 30
 Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala His
 35 40 45
 Gly Pro Leu Gly Gly Pro Ala Pro Pro Ser Ala Pro Pro Pro Pro Pro
 50 55 60
 Pro Pro Pro Pro His Ser Phe Ile Lys Gln Gly Pro Ser Trp Gly Gly
 65 70 75 80
 Ala Glu Leu His Xaa Xaa Gln Tyr Leu Ser Ala Phe Thr Val His Ser
 85 90 95
 Ser Gly Gln Val His Trp His Gly Arg Gly Leu Ser Leu Arg Ala Pro
 100 105 110
 Arg Pro Pro Ser Ala Gln Pro Gly Val Ile Arg Pro Gly Gln Asp Val
 115 120 125
 Ser Arg Ala Leu Pro Ala Gln Pro Pro Arg Glu Pro Ala Arg Tyr Pro
 130 135 140
 Gln Ser Gly Leu Gln His Gly His Leu Arg Arg Gly Val Arg Leu Arg
 145 150 155 160
 Ser His Ala Leu Ala Pro Cys Gly Ala Val Leu Xaa Xaa Thr Arg Ala
 165 170 175
 Gly Ser His Gly Pro Ala Gly Ser Ala Gly Ala Ala Val Leu Gly Ala
 180 185 190
 Ala Pro Gly Leu Trp Pro Pro His Pro Arg Arg Gln Leu Arg Arg Gln
 195 200 205
 Pro Gly Phe Ala Ala Glu Gly Ala Leu Gln Arg Arg Phe Ile Pro Ser
 210 215 220
 Asp Val Pro Ala Val His Gly Leu Glu Ser Asp Glu Pro Arg Gly Arg
 225 230 235 240
 Leu Xaa Gly Pro Xaa Xaa Xaa Val Arg Glu Arg Ser His Asn Ala Arg


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      130              135              140
Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr
145              150              155              160
Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe
              165              170              175
Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln
              180              185              190
Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser
              195              200              205
Cys Thr Gly Ser Gln Ala Leu Leu Arg Thr Pro Tyr Ser Ser Asp
              210              215              220
Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln
225              230              235              240
Met Asn Leu Gly Ala Thr Leu Lys Gly His Ser Thr Gly Tyr Glu Ser
              245              250              255
Asp Asn His Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile His
              260              265              270
Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Pro Gly
              275              280              285
Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys Arg
              290              295              300
Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys Leu
305              310              315              320
Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro Tyr
              325              330              335
Gln Cys Asp Phe Lys Asp Cys Glu Arg Phe Phe Arg Ser Asp Gln
              340              345              350
Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln Cys
              355              360              365
Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His
              370              375              380
Thr Arg Thr His Thr Gly Glu Lys Pro Phe Ser Cys Arg Trp Pro Ser
385              390              395              400
Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn
              405              410              415
Met His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala Leu
              420              425

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<210> 409
<211> 495
<212> PRT
<213> Homo sapiens

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```

<400> 409
Met Ala Ala Pro Gly Ala Arg Arg Ser Leu Leu Leu Leu Leu Leu Ala
 1              5              10              15
Gly Leu Ala His Gly Ala Ser Ala Leu Phe Glu Asp Leu Met Gly Ser
              20              25              30
Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro Ser Leu Gly
              35              40              45
Gly Gly Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala Gln Trp Ala
              50              55              60
Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr Gly Ser Leu

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